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The University of Southern Mississippi

THE PERCEPTIONS OF THE EFFECTIVENESS  
OF MAKING MIDDLE GRADES WORK

by

Darryl Rene' Porter

Abstract of a Dissertation  
Submitted to the Graduate School  
of The University of Southern Mississippi  
in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Philosophy

August 2013

ABSTRACT

THE PERCEPTIONS OF THE EFFECTIVENESS  
OF MAKING MIDDLE GRADES WORK

by Darryl Rene' Porter

August 2013

Many school districts throughout the United States utilize educational programs in their schools to improve student achievement. The Southern Regional Education Board recognized that to improve graduation rates in high school, students' academic performance in middle schools needed to be improved, which gave rise to the Making Middle Grades Work initiative. The researcher conducted this study to determine the perceptions of the effectiveness of Making Middle Grades Work initiative. Participants in this study included 114 teachers and 18 administrators. The participants indicated their perceptions of the effectiveness of the Making Middle Grades Work initiative by responding to questions on a survey that utilized a Likert scale. The researcher collected quantitative data on students' achievement scores on the Alabama Reading and Math Test during the years 2010-2011 and 2011-2012. The researcher conducted an independent sample *t* test to determine if there was a significant difference between teachers' and administrators' perceptions of the effectiveness of the Making Middle Grades Work initiative.

After the researcher conducted an independent sample *t* test, the researcher determined that there was a significant difference between the teachers' and administrators' perceptions of effectiveness of the Making Middle Grades Work initiative. The mean scores of the administrators were higher than the teachers mean

scores. This indicated that the administrators had a stronger opinion about the effectiveness of the Making Middle Grades Work initiative than the teachers did. The researcher conducted a Pearson's  $r$  to assess the relationship between the perception of the teachers and administrators and their schools' score on the Alabama Reading and Math Test. The Pearson's  $r$  test determined that there was no correlation between the variables. The researcher conducted a paired samples  $t$  test to compare 2010-2011 reading scores to 2011-2012 reading scores and to compare 2010-2011 math scores to 2011-2012 math scores. The paired samples  $t$  test determined that there was significant difference in the math and reading scores.

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OF MAKING MIDDLE GRADES WORK

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A Dissertation

Submitted to the Graduate School  
of The University of Southern Mississippi  
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for the Degree of Doctor of Philosophy

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August 2013

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## CHAPTER 1

### INTRODUCTION

#### Background

Middle school leaders have the responsibility of educating children in grades six through eight in the Mobile County Public School System. These children are growing, developing, and changing at a phenomenal rate during this time in their education. Schools have used several educational programs and strategies to increase achievement with middle school students. During the past decade, there has been a significant increase in the emphasis on achievement at the middle level as well as all public school levels. The *No Child Left Behind Act of 2001* (No Child Left Behind Act of 2001, 2002) has pushed testing and achievement into a new realm of education in the nation as well as the Mobile County Public School System.

Although the Mobile County Public School System student population has declined over the last couple of years, the Mobile County Public School System remains by far the state of Alabama's largest school district, with 62,553 students in kindergarten through 12<sup>th</sup> grade. If prekindergarten students are included, that number goes up to 64,202. Mobile County is opening a new school, bringing its total to 93. That breaks down to 56 elementary schools, 19 middle schools, 13 high schools, 3 special-education schools, and 2 career-technical schools. Operating with a \$437 million general fund, the system spends an average of \$8,844 per student. The average teacher salary is \$45,697. The school system is the county's largest employer, with 7,723 workers, including 4,240 teachers. Mobile County Public School System is also the largest restaurant in town, feeding 61,198 meals a day. That is 43,508 lunches and 17,690 breakfasts (Mobile County Public School System, 2010).

The Mobile County Public School district is one of the leaders in reform and technology throughout the state. One of the programs adopted by Mobile County to improve student achievement in the middle grades is the Making Middle Grades Work initiative of the Southern Regional Education Board. Public elementary and middle schools traditionally have embraced initiatives that promise improved student achievement; however, efforts to boost student performance often have yielded only short-term gains despite tremendous expenditures of state and local funds (National Center for Educational Statistics, 2006a). Developing new programs and motivating students to learn are the keys to improvement of achievement and success in the classroom (Newell, 2003). Educators must explore a variety of instructional methods and strategies to improve overall classroom experiences on a continuous basis. Teachers have to continually change their instructional methods to reflect the needs of their students (Newell, 2003).

### Theoretical Framework

The theoretical framework for this study comprises improving instructional strategies and creating a culture of high expectations in the classroom to increase student achievement. According to Llewellyn (2003), it was during the early 1970s that educators began to endorse the ideas of Jean Piaget, a renowned psychologist who promoted the idea that students at all grade levels learned best when they were actively involved in learning using tangible materials. Piaget believed that students should interact with their peers and given frequent opportunities to do so during the class time. Piaget identified four stages in cognitive development: sensori-motor, preoperational, concrete, and formal. From age 12 to adulthood, children enter the formal operations stage, which allows them to think logically and show lingering egocentrism. Piaget

believed that individuals must adapt to their environment. He described two processes for adaptation, which is an organism's ability to fit in with its environment, assimilation, and accommodation (Dimitriadis & Kamberelis, 2006). Assimilation is the process of using or transforming the environment to preexisting cognitive structures in order to accept something from the environment. It changes the scheme, so it can increase its efficiency. Piaget's thinking was similar to John Dewey, one of the most influential educational theorists of the 20<sup>th</sup> century, who believed that knowledge retention would occur because of the learner using what he or she had learned (Phillips & Soltis, 1991).

The Making Middle Grades Work initiative incorporates instructional strategies that address the accelerating student achievement. A teacher's instructional strategies have tremendous impact on the academic success of a student (Marzano, 2003). The primary mission of Making Middle Grades Work is to create a culture of high expectations and continuous improvement that prepares middle grades students for challenging high school studies. Caring, sharing, trusting, and cooperating are words used to describe a school's culture or climate (Sashkin & Walberg, 1993). School climate and culture is a factor that affects student achievement (Marzano, 2003). The Making Middle Grades Schools Work initiative incorporates instructional strategies that address increasing student achievement. Making Middle Grades Work is about improving student achievement in the critical middle grades. It is an effort-based school improvement initiative founded on the conviction that most students can master rigorous academic studies—if schools create an environment that motivates them to make the effort to succeed. Students are motivated to achieve at high levels when:

1. They learn a rigorous academic core taught in ways that enable them to see the usefulness of their studies.

2. There are supportive relationships between students and adults. These relationships provide students with the extra help and support they need to meet challenging course standards and make successful transitions from elementary schools to the middle grades and from the middle grades to high school.
3. Teacher advisers in middle grades schools work with parents and students to set goals and select rigorous courses that prepare students for college preparatory classes in high school.
4. School leadership focuses on supporting what and how teachers teach by providing common planning time and professional development aligned with school improvement plans and the Making Middle Grades Work key practices (Cooney, 2002).

The aforementioned conditions create an environment where more students and their parents recognized that the middle grades matter and where more students become independent learners able to set future educational goals and choose courses to achieve those goals. In an era of rising workplace requirements, getting a good high school education is more important now than at any previous time. Responsibility rests with middle grades schools to prepare students for rigorous high school studies that, in turn, prepare them for future studies and careers.

Another theoretical framework for this study is the constructivist theory, which states that students learn best by actively constructing their own understanding (Bruner, 1966). Strategies associated with Making Middle Grades Work encourage learners to think critically, be creative, research and explore, self-assess, and collaboratively work together for a common goal. As far back as the early 1900s, John Dewey (1997)

supported learning by doing. Constructivism explains how individuals construct knowledge through interactions with their environment. Through conducting investigations and conversations, students are learning by constructing new knowledge built from their current knowledge (North Carolina State University, 2002).

Engaged learning has always been an integral part of a successful classroom. According to Jones, Valediez, Nowakowski, and Rasmussen (1994), there are eight indicators that promote meaningful, engaged learning:

1. Vision is exactly what engaged learning looks like in the classroom. Students are responsible for their own learning and are continuously self-evaluating to determine what their goals are and what direction they will take.
2. Tasks, which are challenging and meaningful to students. These tasks contain components which require students to effectively collaborate with one another and with others in the learning community.
3. Assessment, which involves presenting students with tasks that generate a project or completed product that will explain the concept that they are studying. Performance-based assessment is essential in the lessons so that students may perform, evaluate, and report what they are accomplishing.
4. Instructional models and strategies, which are interactive in nature, are important to engage learning in the classroom. Students interact with peers and with teachers to summarize, problem solve or brainstorm, and create effective techniques for solving their problems.
5. Learning context of engaged learning classrooms is important for developing a learning community among students. The environment should promote diversity of values and different perspectives from all students.

6. Grouping is essential for students to have the opportunity to effectively communicate and collaborate with one another in their communities. This allows the strengths of each unique individual to become apparent in the learning process.
7. Teacher roles for engaged learning are also important. The teacher is most effective as the facilitator rather than just the primary instructor.
8. Student roles, which promote appropriate interaction with other individuals, are an integral part of the engaged learning classroom. This ensures that students take on roles, which require them to become producers and discover that they are instructors and teacher, themselves. (p. 234)

The constructivist classroom is the ideal place for implementing Making Middle Grades Strategies. Constructivism learning students are involved in cooperative learning projects where problems solving, brainstorming, and finding solutions are an integral part of the lesson (Newman & Wehlage, 2005). The Making Middle Grades Work school improvement design consists of a framework of goals, key practices, and key conditions for accelerating learning and setting higher standards. It recommends research-based practices in schools to improve academic and exploratory instruction and sustained student achievement.

### Purpose of the Study

The purpose of this study was to determine the perceptions of a sample of teachers and administrators in Mobile County Middle Schools as they relate to their perceptions of the effectiveness Making Middle Grades Work initiative of the Southern Regional Education Board. The effectiveness of the Making Middle Grades Work initiative was measured using a survey to ascertain the perceptions of teachers and



administrators of middle schools in the Mobile County Public School System that use Making Middle Grades Work. The significance of this study was to determine if the Making Middle Grades Work initiative has increased student achievement in middle schools of Mobile County Public Schools. The Making Middle Grades Work initiative is a very expensive initiative and every school has to agree to set aside monies for the program. Therefore, school leaders need to see if the initiative is helping to increase the achievement of their students. Data for this study came from two sources: (a) Surveys for the teachers and administrators of the middle schools in Mobile County Public Schools that use the Making Middle Grades Work initiative, and (b) Statistical data from the Alabama Reading and Mathematics Test for the schools from The Department of Education of Alabama.

#### Statement of the Problem

School leaders are responsible for providing an educational environment in schools that are challenging and engaging for the students. Because Alabama students earn low standardized achievement test scores nationally, reform in school is necessary to improve achievement. According to Dillion (2007), “American students even in low-performing states like Alabama do better on math and science tests than students in most foreign countries, including Italy and Norway” (p. 7). Although that sounds like good news, the truth remains that Alabama is a low-performing state in these United States. Generally, Alabama students were not interested or successful in math and science; they generally earn low standardized achievement test scores in these subjects. Turning the trend of low-performing students in math and science in Alabama is important since economic studies predict that eight out of 10 jobs in the future will be related to math and science (The White House, 2004).

### Research Questions

The researcher examined the following research questions:

1. Is the Making Middle Grades Work initiative effective in increasing student achievement based on teachers' and administrators' perceptions?
2. Is the Making Middle Grades Work initiative effective in increasing student achievement based on student test scores on the Alabama Reading and Math Test (ARMT)?
3. What are teachers' and administrators' perceptions regarding the implementation of the Making Middle Grades Work initiative?
4. What do teachers and administrators perceive to be positive aspects of Making Middle Grades Work?
5. How can Making Middle Grades Work be improved based on teachers and administrators?
6. Are there statistically significant relationships between teachers' and administrators' perceptions of Making Middle Grades Work and the achievement levels of their students?

### Assumptions

The following assumptions guided this study:

1. All of the data were entered correctly is assumed to be correct.
2. It is an assumption of this study that archival student data are accurate.
3. Teachers and administrators were open and honest in their responses to the survey items.
4. The data provided by the Alabama State Department of Education are complete and accurate.

### Delimitations

This study was subjected to the following:

1. Only middle schools in the Mobile County Public School System participated in the study.
2. Only the perceptual aspects of teachers and administrators currently teaching in Making Middle Grades Work schools were included.

### Definition of Terms

The following definitions have a particular significance in the study:

*Constructivist theory* - a theory with the key notion that people learn best by actively constructing their own understanding. The fundamental belief of this theory is that all knowledge constructed through a process of reflective abstraction and cognitive structures within the learner facilitate the process of learning and constant development (Bruner, 1966).

*Cooperative Learning/Collaboration* - cooperative learning is working together to accomplish shared goals. Outcomes sought during this process are beneficial to all participants. Instructional methods used in the classroom are cooperative learning technique (Houghton Mifflin, 2006).

*Inquiry-based instruction* - the science, art, and spirit of imagination; the scientific process of active exploration by which people use critical, logical, and creative thinking skills to raise and engage in questions of personal interest. The technique helps students connect prior understanding to new experiences, modify and accommodate previously held beliefs and conceptual models, and construct new knowledge (Llewellyn, 2003).

*Project-based learning* - authentic project design that impacts the classroom, world environments, keys to success, and technology in classroom activities which has the potential to increase motivation for student success. It involves cooperative learning, problem solving, real world experiences, prior knowledge, and reaching intended goals by presenting a final group project (Blumenfeld et al., 1991, p. 392).

*Small group active instruction* - students work in small groups to complete learning activities that require their active involvement.

*SREB* – Southern Regional Education Board.

### Justification of the Study

Schools are required to use scientifically research based instructional methods and programs when using Title 1 fund. All of the middle schools in the Mobile County Public Schools use some of their Title 1 funds to pay to participate in the Making Middle Grades Work initiative. This study is of interest to the Mobile County Public School System as well as to the State Department of Education due to funding for the Making Middle Work initiative. In the Mobile County Schools System, funding for Making Middle Grades Work is a large expense; and, therefore, it is vital to determine the effectiveness of the initiative. The perceptions of teachers and administrators in the middle schools participating in Making Middle Grades Work are very important in determining the effectiveness as it relates to student achievement. Making Middle Grades Work initiative uses research-based instructional methods, teacher professional development, and other methods to increase student achievement. Determining the effectiveness of Making Middle Grades Work in regards to student achievement is crucial for Mobile County Public Schools. This study has important implications for schools across the southeast that the Southern Regional Education Board serves. The continued

desire to improve student achievement by using reform programs such as Making Middle Grades Work requires study of the effectiveness of such programs.

## CHAPTER II

### LITERATURE REVIEW

#### School Reform

Imagine education in its early days. The first cave man to discover the process of making fire started it all. Someone probably asked him or her how did you do that. Then he or she sat the student down and demonstrated how to make fire. This first class probably was informal and casual. These humble beginnings led to what there is now in formal education. Even during the days of Aristotle, education focused on achievement.

In 1983, with the publication of the report *A Nation at Risk*, educational reform became important to education. The report outlined the poor state of affairs within the K-12 environment, from low basic comprehension rates to high dropout rates. *A Nation at Risk* became the call to arms for the nation. The need to improve student achievement especially in math and science has received great interest in recent years as studies reveal mediocre academic performance by American students in comparison to their international counterparts (A+ Educational Foundation, 2005).

One of the greatest changes initiated by this reform was that of standardization. Although the majority of states already required periodic standardized testing of students, the results of those tests did not always lead to direct assistance to the children who were scoring poorly. By the mid-1980s, though, 45 states had expanded their testing, including more strenuous graduation requirements, more regular testing, and greater standardized test preparation. In addition, despite the vast development of reform, research now suggests that this focus on standardization did little to affect student learning and comprehension. Studies suggest that changes in professionalism and administration did not always trickle down to effective education strategy

implementation. Slavin (1989) characterized educational reform as a "pendulum" that swings from one education fad to another. The *No Child Left Behind Act* (NCLB) (2002) has mandated accountability in education with adequate yearly progress (AYP).

Reform of middle school, especially science and mathematics, education has been an ongoing effort for over half a century in the United States. However, none of the suggested reform methods has led to significant change in the achievement level of American students at the national level or international comparisons. According to Ritchie, Roth, and Tobin (2001), the trend in classrooms, especially elementary classrooms, of teaching science and math are removed from the everyday world. Some teachers include hands-on activities, but they fail to make the activities complicated enough to allow students to understand the underlying concept involved in the activity.

America's schools are in need of school reform due to the decline of the educational system. School improvement happens when well-prepared teachers work in conjunction with the rigorous high quality curriculum. Achievement in America's schools has been on the decline during the last few decades losing ground to such nations as Finland. Finland has been improving its schools over the last few decades, and has come from behind to become the world leader in student achievement. Finland's strategy is the opposite of what is being done in America (Darling-Hammond, 2010). A recent analysis of the Finnish System summarized its core principles as follows:

1. Resources for those who need them most.
2. Qualified teachers.
3. Evaluation of education.
4. Balancing decentralization and centralization (Darling-Hammond, 2010).

The process of change has been almost the reverse of policies here in the United States. Finland has shifted from a highly centralized system emphasizing external testing to a more localized system. (Darling-Hammond, 2010, p. 121)

Political pressures to perform and to improve the profession of teaching and learning in terms of student achievement exist as never before (Fullan, 1995). Education is experiencing a revolution of sorts as federal mandates require that all children have equal and adequate educational opportunity (Barr & Parrett, 2007). Schools and districts are accountable for students' annual academic performance and achievement.

The comprehensive school reform (CSR) program is an important component of the *No Child Left Behind Act* (2002). It is helping raise student achievement by assisting public schools across the country to implement effective, comprehensive school reforms that are based upon scientifically based research and effective practices. The focus of the CSR program is to raise student achievement by employing proven methods and strategies to produce comprehensive school reform. CSR builds upon and leverages ongoing state and local efforts to connect higher standards and school improvement. This program helps to expand the quality and quantity of school-wide reform efforts that enable all children, particularly low-achieving children, to meet challenging academic standards.

The U. S. Department of Education has identified 11 components specific to CSR:

(a) employs proven methods for student learning, teaching, and school management that are based on scientifically based research and effective practices and have been replicated successfully in schools; (b) integrates instruction, assessment, classroom management, professional development, parental involvement, and school management; (c) provides high quality and continuous



teacher and staff professional development and training; (d) includes measurable goals for student achievement and established benchmarks for meeting these goals; (e) is supported by teachers, principals, administrators, and other staff throughout the school; (f) provides support for teachers, principals, administrators, and other school staff by creating shared leaders and a broad base of responsibility for reform efforts; (g) provides for meaningful involvement of parents and the local community in planning, implementing, and evaluating school improvement activities; (h) uses high-quality external technical support and assistance from an entity that has experience and expertise in school-wide reform and improvement, which may include an institution of higher education; (i) includes a plan for the annual evaluation of the implementation of the school reform and the student results achieved; (j) identifies federal, state, local, and private financial and other resources available that schools can use to coordinate services that support and sustain the school reform effort; and (k) meets all of the following requirements—the program has been found, through scientifically based research, to significantly improve the academic achievement of participating students; or the program has been found to have strong evidence that it will significantly improve the academic achievement of participating children. (U. S. Department of Education, 2010, p. 25)

Education is a complex system influenced by many factors such as theory, history, economics, and political agendas. Educators have embraced new theories, fads, and trends in time with little or no regard for the research related to teaching and learning (Friedman, Harwell, & Schnepel, 2006). The federal government has attempted to improve education through policy making (Anyon, 2005). The federal government has

enacted policies such as the *Smith-Hughes Act* of 1917, No Child Left Behind (NCLB) in 2002, to the current Race to the Top program implemented in 2009 to spur educational reform.

No Child Left Behind, the Bush-era law mandating standardized testing as a measure of school success, is not working and needs to be reformed. This was the thrust of a speech by President Barack Obama, who repeated, “We have to fix No Child Left Behind” five times while speaking at a Virginia middle school (Gordy, 2011 p. 36).

President Obama argues that while the goals of No Child Left Behind—higher standards, teacher accountability, and closing the achievement gap—are good ones, the policy, which imposes sanctions on schools that fall short of its set standards, is too rigid, underfunded, and ineffective. He pointed out that, under the current system, 80 % of U. S. schools are failing, including schools that are making remarkable progress (Gordy, 2011).

The president’s newly released education reform blueprint zeros in on the poorest schools in the country. He has called on states to identify their lowest-performing schools and take bold action to transform them—including firing ineffective principals and teachers. On the other hand, President Obama repeated his call for increased support for teachers, especially in the form of better training, more classroom funding, and higher salaries. “We’re going to have to start paying good teachers like the professionals that they are,” he said (Gordy, 2011 p. 37).

According to The U. S. Department of Education Race to the Top (2009), abbreviated RTT, is a \$4.35 billion United States Department of Education program designed to spur reforms in state and local district K-12 education. President Barack Obama and Secretary of Education Arne Duncan announced Race to the Top on July 24, 2009. Race to the Top prompted 48 states to adopt common standards for K-12 and

spurred reform in K-12 education. Race to the Top scored the following criteria for funding:

1. Great Teachers and Leaders
  - a) Improving teacher and principal effectiveness based on performance
  - b) Ensuring equitable distribution of effective teachers and principals
  - c) Providing high-quality pathways for aspiring teachers and principals
  - d) Providing effective support to teachers and principals
  - e) Improving effectiveness of teacher and principal preparation programs

High standards and supports for special needs
2. State Success Factors
  - a) Articulating State's education reform agenda and LEAs' participation in it.
  - b) Building strong statewide capacity to implement, scale up, and sustain proposed plans
  - c) Demonstrating significant progress in raising achievement and closing gaps
3. Standards and Assessments
  - a) Developing and adopting common standards (from the Common Core State Standards Initiative)
  - b) Supporting the transition to enhanced standards and high-quality assessments
  - c) Developing and implementing common, high-quality assessments
4. General Selection Criteria
  - a) Ensuring successful conditions for high-quality performing charters and other innovative schools

- b) Making education funding a priority
- c) Demonstrating other significant reform conditions
- 5. Turning Around the Lowest-Achieving Schools
  - a) Turning around the lowest-achieving schools
  - b) Intervening in the lowest-achieving schools
- 6. Data systems to Support instruction
  - a) Fully implementing a statewide longitudinal data system
  - b) Using data to improve instruction

Accessing and using State data. (U. S. State Department of Education, 2009 p. 126)

In the 21<sup>st</sup> century, high quality, effective professional development is not only a major factor influencing school effectiveness; it is at the core of virtually every proposal to enhance education. However, while professional development continues to be popular at all levels, little empirical data exist that demonstrate a documented link between teachers' professional development choices, their instructional goals, the academic needs of their students, and, most importantly, the academic achievement of the students.

Several prominent professional organizations have tried to provide some sense of direction to address this gap. For example, The Carnegie Council on Adolescent Development (1989) investigated the challenges of teaching early adolescents noting high quality effective professional development as a focus with an emphasis on teacher empowerment and quality training. Additionally, this Task Force on Education of the Young Adolescent published documents, *Turning Points* (1989) and *Turning Points 2000* (Jackson & Davis, 2002), outlining recommendations for professional development as a way to improve classroom instruction and address the learning needs of the young

adolescent. Subsequently, the National Middle School Association (NMSA, 2002) emphasized professional roles and responsibilities with organizational development as well as individual development as necessary factors for effective professional development. However, members of the educational community to date have not had the benefit of research that has determined the efficacy of any of these levels.

Enacting more than a thousand reform laws since 1970 (Gibbs & Fox, 1999), educators and education policymakers need to separate the politically driven from the research driven. Failing to make such distinctions may lead to the conclusion that any reform effort that leaves public education intact is doomed to failure, as Finn (1996) believed:

The most common approach of the school-reform industry has amounted to piecemeal tinkering with the countless gears and levers of the existing educational machinery: up-grading teacher-training programs, stiffening graduation requirements, installing modern technology, revamping reading programs, shrinking class size, adding a period to the school day...Certainly many such changes are worth making...But piecemeal reform will not fundamentally alter the working of a system in such serious disarray. (p.43)

Paying attention to the classroom is more important than justifying vouchers with these arguments. Restructuring initiatives such as site-based management, charter schools, and voucher systems change the decisions and empower parents. One such initiative that changes what goes on in the classroom is Making Middle Grades Work.

#### The Making Middle Grades Work Initiative

The Alabama Middle School Initiative (AMSI) is a school improvement reform model based on the Southern Regional Education Board's Making Middle Grades Work

(SREB, 2010). The purpose of the middle grades initiative is to develop, implement, evaluate, and refine a comprehensive, whole-school improvement effort that will help all middle grade students receive a high quality, challenging, and appropriate education that prepares them for success in college-preparatory level courses in high school (SREB, 2010). Making Middle Grades Work is a comprehensive school improvement design for the critical middle grades. It is the nation's first large-scale state, district, and school leaders initiative in partnerships with teachers, students, parents, and the community to raise student achievement in the middle grades.

Under recent policies and legislation such as No child Left Behind, schools are now responsible for raising the achievement of all students while also raising the achievement of under-performing student groups at faster rates. Yet, according to NAEP, there has been no significant change in the reading or mathematics achievement gap among eighth-grade students from 1992 through 2005 (National Center for Educational Statistics, 2006a).

The Making Middle Grades Work model is a framework of goals, key practices, and key conditions that, when implemented, results in more students leaving the middle school well prepared for challenging high school studies. The framework offers schools a set of key practices that include aligning core academic courses with high school readiness standards, engaging students in authentic assignments that include the use of technology, and providing extra help and support to students who are not meeting grade-level standards.

The Making Middle Grades Work initiative came from an outgrowth of the Southern Regional Education Board High Schools That Work initiative (SREB, 2010). In an era of rising workplace requirements, successfully completing high school is more

important now than at any previous time. The Making Middle Grades Work design recommends research-based practices for schools to improve student achievement.

Many students entering the ninth grade are not prepared for the more demanding course work required of high school students. On a 2006 survey of more than 11,000 ninth-graders at *High Schools That Work (HSTW)* schools, 39 % of students said that they were not prepared with the necessary reading skills for college-preparatory high school courses. Additionally, 49 % reported being unprepared in writing, 57 % reported being unprepared in mathematics, and 60 % reported being unprepared in science (Timberlake, 2006). The Making Middle Grades Work initiative sets goals for high expectations and continuous improvement:

1. Increase the percentages of students who meet Making Middle Grades Work performance goals in reading, mathematics, and science.
2. Increase annually the percentage of students entering high school prepared to succeed in college-preparatory courses. (SREB, 2010 p. 25)

The Making Middle Grades Work initiative focuses on a variety of instructional methods in the classroom. There are several methods of delivering instruction; some methods are more effective than others are. One method, such as lecture, does not engage students in the learning process and makes class less interesting or boring. Despite the research evidence that supports varied instructional methods classrooms still need effective teaching strategies. Many teachers used teaching methods that are antiquated and not effective for student achievement, which leads to academic failure and ultimately disinterested students who drop out of school (Bost & Riccomini, 2006).

Teachers who spend a lot of class time lecturing are not able to evaluate whether a student understands the concept. By incorporating a lesson that allows students to

participate, the student is actively engaged in learning and has the opportunity to demonstrate that he or she has mastered the objective. Making Middle Grades Work uses several research-validated practices as a foundation for effective teaching. The use of these research-validated practices is essential for the success of the educational system in the 21<sup>st</sup> century (Bost & Riccomini, 2006).

The key for achievement, especially in middle school, is keeping the student actively engaged in the lesson. In the article “Effective Instruction: An Inconspicuous Strategy for Dropout Prevention,” Bost and Riccomini (2006) gave an overview of 10 effective principles that teachers can use to make instruction more effective and keep students actively engaged in the lesson. The 10 principles include active engagement, grouping, and scaffold instruction. Active engagement refers to the amount of time students and teachers spend working on instructionally appropriate task (Bost & Riccomini, 2006). Another principle is grouping, which suggests that students achieve best in classes where they spend most of their time engaged in the lesson supervised by their teacher. Scaffold instruction is one of the 10 principles that promote independent learning. This principle facilitates a teachers’ ability to keep students actively engaged in the classroom. (Bost & Riccomini, 2006).

In 1999, Gardner’s theory originally included seven intelligences. They were:

1. Logical-Mathematical Intelligence – Consists of the ability to detect patterns, deductive reasoning and thinking logically.
2. Linguistic Intelligence – Involves having a mastery of language.
3. Spatial Intelligence – The ability to create mental images in order to solve problems.
4. Musical Intelligence – The capability to recognize and compose musical



pitches, tones, and rhythms.

5. Bodily – Kinesthetic Intelligence – The ability to use one's mental abilities to coordinate one's own bodily movements
6. Personal Intelligence – The interpersonal feelings and intentions of others.
7. Intrapersonal Intelligence – the ability to understand one's own feelings and motivations. (p. 126)

Making Middle Grades Work incorporates several instructional methods.

Strategies employed by Making Middle Grades Work are research based on the best ways students learn and the best way to teach them. One remarkable research produced in 1983 by psychologist Howard Gardner proposed a theory that describes different kinds of “intelligences” demonstrated by human beings. Gardner argued, “The intelligences are used together and typically complement each other as individuals develop skills or solve problems” (Brualdi, 1996 p.59).

Gardner (1999) considered expanding the list of intelligences. Naturalist is an intelligence that combines a description of the core ability with a characterization of a role that many cultures value (Gardner, 1999). A naturalist demonstrates expertise in the recognition and classification of the many species of his or her environment (Gardner, 1999). Naturalists are often biologists, ornithologists, hunters, farmers, and cooks (Kincheloe, 2004). A naturalist is only intelligent if he or she is engaged in nature (Kincheloe, 2004). Gardner (1999) added the naturalist intelligence to the original seven intelligences, which demonstrates that there may be more intelligence.

Students have a variety of intelligences and talents that they bring to the classroom. All students learn differently, and a teacher has to use a variety of methods to reach these students with varied learning styles. The important responsibility of teacher's

to reach all of the varied learners in their classrooms by diversifying their instruction. The Theory of Multiple Intelligences implies that educators should acknowledge and teach to a broader range of talents and skills in the classroom. Teachers should structure their presentations of material in a style which engages most or all of the intelligences (Brualdi, 1996). Gardner's Multiple Intelligences theory acknowledges that not all students may be mathematically or verbally intelligent; these children may have strengths in other areas, such as music, spatial relations, or interpersonal knowledge. Teaching and assessing learning in this manner allows a wider range of students to successfully participate in classroom learning (Brualdi, 1996).

The Making Middle Grades Work initiative uses research-based techniques to reach all students. Gardner's (1999) research is referred to as brain-based research. Brain-based research focuses on how the brain works to gain an understanding of how students learn and develop in the classroom (Madrazo & Motz, 2005). Making Middle Grades Work focuses on instructional strategies. Based on research, instructional strategies have a tremendous impact on the academic achievement of a student (Marzano, 2003).

Marcia Tate's (2003) book *Worksheets Don't Grow Dendrites: Instructional Strategies that Engage the Brain* introduces 20 instructional strategies that, according to brain-based research, take advantage of the way the brain learns best. In the book, she gives teaching strategies that best reach learning styles for improving academic achievement. Tate's strategies are:

1. Writing
2. Story telling
3. Mnemonic devices

4. Visuals
5. Movement
6. Role play
7. Visualizations
8. Metaphor, analogy, simile
9. Reciprocal teaching, cooperative learning
10. Music
11. Graphic organizer
12. Drawing
13. Humor
14. Discussion
15. Games
16. Project based instruction
17. Field trips
18. Manipulatives
19. Technology
20. Work-study

Teachers using these strategies should be able to motivate and engage students to improve academic achievement. (p. 48)

The Making Middle Grades Work initiative uses research brain-based instructional methods that improve academic achievement. A teacher-level factor that affects student achievement is instructional strategies (Marzano, 2003). The most effective teachers use these research brain-based instructional strategies. These effective teachers have more instructional strategies at their disposal (Marzano, 2003). The

Southern Regional Board and its Making Middle Grades Work improvement initiative have a vision for middle grade education based on preparing students for success in college preparatory courses in high school. In the article *Implementing School Reform: Making Middle Grades Work for All Students*, Gene Bottoms (2006) summarized 10 key practices of the Making Middle Grades Work School improvement framework that includes:

1. An academic core—all students in the middle grades need an academic core curriculum that accelerates their learning so that they succeed in college-preparatory English, mathematics, and science.
2. A belief that all students matter—each middle grades students needs an adult who takes an interest in his or her successful learning, goal setting, educational planning and personal growth.
3. High expectations and extra time and help—middle grade students need enough time and help to meet more rigorous, consistent standards in a curriculum that accelerates achievement for all students.
4. Classroom practices that engage students—young adolescents need varied learning activities linked to challenging academic content and opportunities to use new skills and concepts in real-world applications.
5. Use of data—States, districts and schools must continuously use data on student, school and teacher performance to review and revised middle grades school and classroom practices as needed.
6. Teachers working together—middle grades teachers need time to plan together, to develop and coordinate learning activities and to share student work that meets proficiency standards.

7. Support from parents—parents must understand clearly and support the highest standards of performance in the middle grades.
8. Qualified teachers—middle grades teachers must know their assigned academic content and how to teach young adolescents.
9. Use of technology to improve knowledge and skills in English/language arts, reading, mathematics, science and social studies.
10. Strong leadership—middle grades schools need strong, effective principals who encourage teachers and participate with them in planning and implementing research-based improvements. (SREB, 2006, p. 6)

The Making Middle Grades Work key practices, which are critical to achievement, serve to unite various programs into a clear mission of improving student achievement and high school readiness. The Making Middle Grades work initiative also has conditions for accelerating student achievement.

Southern Regional Education Board's state leaders developed goals in 2002:

1. Helping ensure students are ready to move from one level of education to another.
2. Raising achievement and closing gaps for different racial, ethnic and gender groups and for those from low-income families.
3. Preparing more students for college and career training.
4. Improving college completion. (SREB, 2006, p. 8)

The Making Middle Grades Work initiative follows a more hands-on, inquiry-based approach, so students develop improved higher-order thinking skills and increased positive attitudes toward subject matter (Degenhart, Mowen, Harlin, Wingenbach, & Lindner, 2005).

The Making Middle Grades Work initiative promotes improvements in the areas of curriculum, instruction, resources, assessment, and professional development for a rigorous education. A study (Gibson, 2003) conducted in 13 regular education schools in Palm Beach County, Florida, supported the value of professional development. In this correlative study, Gibson compared the average number of professional development in-service points earned by the teachers of the School District of Palm Beach County (SDPBC) to the average Florida Comprehensive Assessment Test (FCAT) mathematics and reading scores of the schools in the study. Gibson (2003) found that professional development, paired with higher levels of teacher quality, positively influenced student achievement in reading and mathematics.

#### Project-Based Learning

Making Middle Grades Work fosters the same characteristic in use of professional development as Gibson's (2003) findings. The Making Middle Grades Work initiative provided professional development for the teachers throughout the year. Project-based learning is a large component of the Making Middle Grades Work initiative. The multiple intelligences explain the reasoning behind the fact that students learn more successfully by participating in meaningful, engaging, and investigative activities (Gardner, 1999). Project-based learning methods and the constructivist theory of learning center on the same principles because both stress higher order thinking skills and performance-based assessment. The beliefs of constructivist Bruner (1966) on instruction in the classroom specifics that skills, concepts, and information build upon prior knowledge of the student.

Cognitive and behavioral learning theories supporting direct instruction have taken a new place in schools and communities (Buck Institute for Education, 2002). The

world has changed and educators are now finding that it is necessary to create new ways for students to learn in order for them to become successful in society (Curtis, 2004). As students become involved in projects, they develop ways to become a team (Curtis, 2004). This helps students with becoming motivated because they are all involved in the activity and all have a job to do. Each has to contribute in some way, which for many students increases self-esteem and feelings of accomplishment.

Project-based learning incorporates inductive teaching methods such as inquiry-based learning (Prince & Felder, 2007). Inductive instructional methods use a lot of discovery learning, problem-based investigation techniques, and inquiry. To ensure success, teachers who use project-based learning should help students generate hypotheses, make predictions, and solve problems (Prince & Felder, 2007).

Project-based learning is an instructional method centered on learners instead of direct instruction, which directs learners down specific paths of learning (Harris & Katz, 2001). The students' projects fit their own personal interests, abilities, and learning styles and are completely learner-centered (Harris & Katz, 2001).

The BIE (2002) reported that project-based learning:

1. Overcomes the dichotomy between knowledge and thinking, helping students to both “know” and “do.”
2. Supports students in learning and practicing skills in problem solving, communication, and self-management.
3. Encourages the development of habits of mind associated with lifelong learning, civic responsibility, and personal or career success.
4. Integrates curriculum areas, thematic instruction, and community issues.
5. Assesses performance on content and skills using criteria similar to those in

the work world, thus encouraging accountability, goal setting, and improved performance.

6. Creates positive communication and collaborative relationships among diverse groups of students .
7. Meets the needs of learners with varying skill levels and learning styles.
8. Engages and motivates bored or indifferent students. (p. 6)

In addition, cognitive and behavioral learning theories support project-based learning.

Similarly, cognitive and behavioral learning theories support middle school organization.

### Middle School Organization

At the beginning of the 20<sup>th</sup> century, school children in the United States attended two types of schools: a K-8 institution as well as high school, which served grades 9-12. By the 1930s, educators began to advocate the notion of junior high schools for grades 7-8 as a method of not only preparing students for high school but also meeting the distinctive cognitive needs of young adolescents (Wiles & Bondi, 2001). Due to a concern that these schools did not cater to the specific needs of the population that they served, the idea of a middle school started to come about in the 1960s as a way to focus learning programs on young adolescents (Alexander & McEwin, 1984; Beane, 1993; Clark & Clark, 1993; Cruz, 1993). The term “middle” was used as a descriptor not only for the schools themselves, but also for the students that they served, as these institutions were designed to meet the needs of young people who were between being a child and an adolescent (Alexander et al., 1969). Today, there are more than 14,000 public middle grades schools in the United States. Middle schools represent more than half of this number, and junior high schools account for one-third. This represents a significant change from the 1970s, when junior high school made up as much as three-fourths of the



total number of middle grades schools (Middle Level Leadership Center, 2000; NMSA, 2002).

The period of the middle grades in the educational sequence has seen a number of educational reforms that have sought to better tailor instruction and improve student outcomes in these years. The development of middle grade education is the longest-running, most extensive educational reform movement in the United States. Although it is difficult to establish precisely when and where the first junior high school in the United States was established, the idea for a separate institution devoted to education of early adolescents emerged in the late 19<sup>th</sup> and early 20<sup>th</sup> century (Clark & Clark, 1993).

Critics argued that junior high schools lacked a clear education mission of their own. Most often junior high schools adopted the structures and systems of high schools. The junior high school model ignored the emotional and social pressures of early adolescence. Junior high schools did not meet the developmental needs of the students in teaching methods, climate, size structure, architecture, community relations, or advising systems (Beane, 2001). Junior high schools encourage students to continue their education beyond primary school; but from the outset, they have failed to engage students (Brough, 1995). Junior high and middle schools have been the targets of active reform since they were first established (Juvonen, Le, Kaganoff, Augustine, & Constant, 2004).

Currently, although there is a diversity of forms for middle grades education, schooling in these grades is now predominantly conducted in middle schools, which typically encompass sixth, seventh, and eighth grades (U. S. Department of Education 2001). Yet, despite their emergence as the model form, few educators and researchers would argue that middle schools represent the solution to the shortcomings of other forms (Clark & Clark, 1993). Moreover, a number of studies have documented the difficulties

that students experience in middle school, such as poor grades, behavioral problems, and low self-esteem (Eccles et al., 1991). In large part due to these findings and perceptions of middle schools' harmful effects, numerous districts across the United States have begun to eliminate their middle schools, changing their systems of education for middle grades students to other, usually smaller, schooling forms. In one of the largest such efforts to date, officials of the New York City public schools recently announced plans to abolish the majority of the city's 218 middle schools (Herszenhorn, 2004).

However, up until very recently, the middle school movement has remained strong. Like the junior high school, whose wrongs it was intended to right, according to numerous researchers and educators, the middle school has not lived up to its potential. Based on these perceptions, several districts have recently initiated reforms to dismantle their middle schools (Weiss & Kipnes, 2006). Over the past 30 years, interdisciplinary teaming and 5-8 or 6-8 grade levels have been the most successful (Homestead, & Thompson, 2004). Alexander (1968), the Father of the American middle school, defined a middle school as a school having at least three grades. Interdisciplinary teaming defined as a core of two to five teachers and the students they all teach. Interdisciplinary teaming designed to provide teachers an opportunity to get to know their students, collaborating with colleagues during their planning times and foster collegiality among teachers as a support team (Homestead, & Thompson, 2004).

Interdisciplinary teaming in middle schools has increased significantly across the years. By 1988, 30% of middle schools had organized teachers and students into interdisciplinary teams with 52% doing so by 1993 (McEwin, Dickinson, & Jenkins, 2003). To create a community of learners, interdisciplinary teaming is a research-based strategy. Dickinson, in the article "Reinventing the Middle School: A Proposal to

Counter Arrested Development” (2001), stated that the founders of the middle school concept proposed six classical functions of the middle level school: articulation, integration, exploration, differentiation, guidance, and socialization. According to Dickinson (2001), when middle schools do not enact policies, which address the development needs of students, the students, faculty, and school community experience “arrested development.” Dickinson (2001) described a middle school under arrested development as a school having the following characteristics,

Teachers organized into teams but they do not meet on a regular basis, even though, they have allocated time in their schedules, or when they do meet they continually mire themselves in the rut of student difficulties and failures: a deep cleavage between core and exploratory teachers—in numbers of students, organizational, structure, curricular approaches; advisory programs that look like administrative homerooms or ‘seats-and-sheets’ holding patterns; competitive athletics for the few; lack of parent and community involvement; and a curriculum dominated by classical recitation, boring textbooks, and instructional blandness. (p. 4)

Dickinson (2001) suggested enacting entirely the middle school philosophy, improve organizational structure, and use the integrated curriculum model with students as an active part of their education.

The implementation of middle school reform positively affects student learning and achievement. Specific finds include

1. Achievement scores are higher for students in schools that are teaming with high common planning time (Mertens & Flowers, 2006).

2. Teachers with middle grade certification engage more frequently in “best practices,” which affect achievement. (Mertens, Flowers, & Mulhall, 2002).
3. Students home alone after school for 3 days or more report lower levels of self-esteem and academic efficacy and higher levels of behavior problems (Mertens, Flowers, & Mulhall, 2003 p.57).

What happens in the middle school level is very important. It is in the middle grades where students begin to lose ground in key subjects such as mathematics. Nationally, most states see a decline in middle grade proficiency on the National Assessment of Education Progress (NAEP) compared with elementary levels. In addition, middle grades are the last place to identify students at risk of academic failure and get them back on track in time to succeed in high school. Recent data analyses in California (Bettis, 2008) showed that identifying students early who are at the greatest risk of high school failure during middle grades and the late elementary years by their grades, attendance, behavior, and test scores would improve achievement. Success in key subjects in the middle grades is a strong predictor of success in high school and beyond.

Data about middle school achievement are mixed. Felner, Jackson, and Kasak (1997) found that students in school with a middle school concept firmly established over time achieve at higher levels than those in schools in the early stages of implementation or in schools not attempting to implement middle school principles. Lewis (1993), and Barris (1992) found improved academic achievement in their studies. Much of the criticism of the middle school strikes at its organizing principle—that middle grades should be a time for allowing students to grow and discover their own interests. This principle of exploring and allowing time for the student to grow is called by Bradley (1998) as “muddle in the middle” and a vast educational wasteland by others. Middle

schools expose students to a large number of topics and options. This means that their experiences lack depth, so that students never develop more than a superficial level of understanding (American Association of the Advancement of Science, 1993).

## CHAPTER III

### METHODOLOGY

#### Participants

The participants for this study were teachers and local school administrators. Mobile County Public Schools employs all of the participants in this study. The participants have implemented the Making Middle Grades Work initiative in their schools. In addition, indirectly, middle school students in Mobile County Public Schools were participants by the collection of their Alabama Reading and Math test data from the State Department of Education of Alabama.

#### Design

The researcher conducted a quantitative study to determine the effectiveness of the Making Middle Grades Work initiative. The researcher distributed the surveys to middle school administrators and teachers to collect data on their perceptions of the effectiveness of the Making Middle Grades Work initiative. Quantitative data were used to determine the participants' perceptions of the Making Middle Grades Work initiative. Archival test data were used to determine if there has been any change in student achievement over the 2010-11 and 2011-2012 school years during the implementation of the Making Middle Grades Work initiative. The researcher used quantitative data from the surveys and Alabama Reading and Math test to analyze and determine whether students performed better after implementation of Making Middle Grades Work.

#### Archival Data

Statistical data on student achievement were collected on students who attend middle schools in Mobile County Public Schools. These data were obtained from the Alabama Department of Education on the school and district reports. The Alabama

Reading and Math test is the annual standardized test in Alabama for middle schools. Data from the results of middle schools in Mobile County Public Schools were used to determine the percentage of students who achieved proficiency on the Alabama Reading and Math test before and after the implementation of Making Middle Grades Work. The Alabama Reading and Math test replaced the Stanford Achievement Test Ten in the state of Alabama.

#### Instrumentation

Instruments for this study were a survey designed to measure the participants' perceptions of the effectiveness of the Making Middle Grades Work initiative. The surveys pertained specifically to the participants' experiences with the Making Middle Grades Work initiative. The researcher distributed the surveys to two groups of participants. The two groups consisted of administrators and teachers in the middle schools. The title for the administrators survey is Making Middle Grades Work Administrator Survey (See Appendix A). The title for the teachers' survey is Making Middle Grades Work Teacher Survey (See Appendix B). The surveys used a Likert scale. The participants responded to survey questions with *strongly agree*, *agree*, *neutral*, *disagree*, and *strongly disagree*.

The researcher designed the surveys to determine the perceptions of the effectiveness of Making Middle Grades Work. The researcher used the surveys to determine if teachers and administrators perceived a relationship between the schools' involvement with Making Middle Grades Work and student achievement. The survey consisted of 10 questions referring to their experiences with the program.

### Instrument Validity

A panel of experts checked validity of the survey questions. The panel consisted of an Assistant Superintendent of Middle Schools and a principal in the Mobile County Public School System. The researcher used a panel of experts to give input and suggestions to improve the instrument. In addition, the researcher conducted a pilot test to check the reliability of the instrument. The researcher used teachers for the pilot study who were not participating in the study. The Cronbach's alpha for the administrators' survey was .70. The Cronbach's alpha for the teachers' survey was .82. After confirming validity and reliability, the instruments were ready for distribution. Cronbach's alpha of .70 or higher is appropriate for research.

### Procedures for Data Collection

After receipt of approval from the Institutional Review Board (IRB) (see Appendix C), a cover letter (See Appendix D), accompanying the surveys was sent out to the schools. The researcher gave the participants 2 weeks to complete the surveys. The researcher provided a box for the collection of surveys at school sites. The researcher made a follow-up phone call after 2 weeks to the principal of the school. The researcher retrieved the surveys from the schools. The researcher explained in the cover letter that participation in the study was strictly voluntary and anonymous. The researcher explained in the cover letter that if they chose to participate in the study they may withdraw at any time without penalty. In addition, the researcher assured potential participants that all survey responses were confidential and participants would remain anonymous.



### Analysis of Data

The researcher used a paired-samples  $t$  test to analyze data from the students' Alabama Reading and Math Test. The researcher used an independent-samples  $t$  test to determine if there was a significant difference among administrators' and teachers' perceptions of the effectiveness of the Making Middle Grades Work initiative. The researcher used a Pearson correlation to assess the relationship between the perception of the teachers and administrators and their schools' scores on the Alabama Reading and Math Test. The researcher used a paired-samples  $t$  test to compare 2010-2011 reading scores to 2011-2012 reading scores and to compare 2010-2011 math scores to 2011-2012 math scores.

## CHAPTER IV

## RESULTS

This chapter presents the survey research results. The researcher analyzed the quantitative data from the surveys using SPSS 20.0 to ascertain the descriptive statistics of the responses to the 10 closed-end questions. On the survey, teachers and administrators chose one of the following responses: *strongly agree*, *agree*, *neutral*, *disagree*, or *strongly disagree*. Survey participants had ample space to share their ideas when answering the open-ended question. The researcher designed the survey to gain insight into teachers' and administrators' perceptions regarding the Making Middle Grades Work effect on student achievement, on them professionally, and on their schools' academic achievement. The researcher used a thematic approach to analyze the data generated by the open-ended question. The statistical data in Table 1 focuses on the performance of students in their individual school on the Alabama Reading and Math Test (ARMT) before and after implementation of the Making Middle Grades Work initiative.

## Archival Data

Table 1

*Performance of Making Middle Grades Work after Implementation of Program on Alabama Math and Reading Test*

SCHOOL	AREA	YEAR	LEVEL III & IV %
A	Reading	2011-2012	92.22
		2010-2011	91.23

Table 1 (continued).

SCHOOL	AREA	YEAR	LEVEL III & IV %
B	Math	2011-2012	80.79
		2010-2011	79.20
	Reading	2011-2012	83.72
		2010-2011	67.89
	Math	2011-2012	65.74
		2010-2011	56.25
C	Reading	2011-2012	89.54
		2010-2011	76.48
	Math	2011-2012	78.46
		2010-2011	68.06
	Reading	2011-2012	83.46
		2010-2011	85.26
D	Math	2011-2012	74.62
		2010-2011	48.83
	Reading	2011-2012	70.43
		2010-2011	67.20
	Math	2011-2012	40.84
		2010-2011	31.75
E	Reading	2011-2012	99.04
		2010-2011	100.00

Table 1 (continued).

SCHOOL	AREA	YEAR	LEVEL III & IV %
G	Math	2011-2012	100.00
		2010-2011	97.35
	Reading	2011-2012	98.57
		2010-2011	92.97
	Math	2011-2012	97.86
		2010-2011	92.36
H	Reading	2011-2012	82.89
		2010-2011	69.70
	Math	2011-2012	64.33
		2010-2011	53.27
	Reading	2011-2012	94.59
		2010-2011	89.58
I	Math	2011-2012	82.31
		2010-2011	72.86
	Reading	2011-2012	77.82
		2010-2011	73.49
	Math	2011-2012	57.72
		2010-2011	58.53
J	Reading	2011-2012	77.82
		2010-2011	73.49
	Math	2011-2012	57.72
		2010-2011	58.53
	Reading	2011-2012	77.82
		2010-2011	73.49

Table 1 (continued).

SCHOOL	AREA	YEAR	LEVEL III & IV %
K	Reading	2011-2012	67.52
		2010-2011	78.79
	Math	2011-2012	87.58
		2010-2011	86.67
L	Reading	2011-2012	85.71
		2010-2011	84.83
	Math	2011-2012	80.87
		2010-2011	80.45
M	Reading	2011-2012	71.86
		2010-2011	74.00
	Math	2011-2012	48.5
		2010-2011	48.00
N	Reading	2011-2012	65.08
		2010-2011	62.10
	Math	2011-2012	64.06
		2010-2011	22.10
O	Reading	2011-2012	86.24
		2010-2011	81.00

Table 1 (continued).

SCHOOL	AREA	YEAR	LEVEL III & IV %
P	Math	2011-2012	72.48
		2010-2011	75.98
	Reading	2011-2012	93.40
		2010-2011	92.04
	Math	2011-2012	100.00
		2010-2011	99.51
Q	Reading	2011-2012	100.00
		2010-2011	99.57
	Math	2011-2012	100.00
		2010-2011	99.57
	Reading	2011-2012	81.47
		2010-2011	73.63
R	Math	2011-2012	67.31
		2010-2011	52.78
	Reading	2011-2012	90.43
		2010-2011	86.93
	Math	2011-2012	80.61
		2010-2011	77.52

The researcher collected data from the State Department of Education to determine standardized test achievement for students in the 19 Making Middle Grades Works schools. The achievement test used for this study is the Alabama Reading and Math Test. Students take the Alabama Reading and Math Test annually in grades 3 through 8 (Alabama State Department of Education, 2013). Test scores are collected by the State Department of Education, are reported to schools in August of each year, and are maintained on the State Department of Education website. The data related to achievement were obtained from the State Department of Education website ([www.aldse.edu](http://www.aldse.edu)). The statistical data in Table 2 focuses on the performance of students on the ARMT as a total for Mobile County.

Table 2

*Performance of Making Middle Grades Work after Implementation of Program on Alabama Math and Reading Test for Mobile County*

SCHOOL	AREA	YEAR	LEVEL III & IV %
	Reading	2011-2012	87.27
		2010-2011	83.60
	Math	2011-2012	75.57
		2010-2011	70.32

The data in Table 3 reflect the number of administrators and teachers who were surveyed. Of the 745 teachers selected for this study, 15% (n = 114) completed and returned the survey. Of the 50 administrators selected for this study, 36% (n = 18) completed and returned the survey.

Table 3

*Administrator and Teacher Information for Making Middle Grades Schools Work*

SCHOOL	NUMBER OF ADMINISTRATORS	NUMBER OF TEACHERS
A	2	37
B	3	56
C	3	44
D	5	68
E	3	18
F	2	39
G	3	41
H	2	33
I	2	18
J	2	42
K	3	49
L	1	24
M	2	18
N	2	28
O	2	45
P	3	30
Q	3	29
R	2	19
S	5	85



Table 3 (continued).

SCHOOL	NUMBER OF ADMINISTRATORS	NUMBER OF TEACHERS
Total	50	745

Table 4 reflects the teaching experience of the 114 staff members who completed the perceptions effectiveness surveys. Of the 114 teachers who completed the surveys 51.8%, or 59, selected 15-20 years of experience. Nineteen teachers selected 0-10 years of experience 16.7% of the time and 6 teachers chose 10-15 years 5.3%.

Table 4

*Teachers' Years of Teaching Experience (n = 114)*

Survey Item Years	Count	Percent
0-10	19	16.7
10-15	06	5.3
15-20	59	51.8
20-25	30	26.3
25 or more	0	0

Table 5 reflects the grade level of prior teaching experience of teachers surveyed. Ten teachers, or 8.8% selected elementary. Thirty teachers, or 26.3% selected middle school as their prior teaching experience on the demographic question on the survey. Fifty-two, or 45.6%, of the teachers selected high school as their prior teaching experience on the demographic question on the survey.

Table 5

*Teachers' Grade Level of Prior Teaching Experience (n = 114)*

Survey Item Grade Level	Count	Percent
Elementary	10	8.8
Middle	30	26.3
High	52	45.6
None	22	19.3

Table 6

*Teachers' Perceptions of Effectiveness (n = 114)*

Survey Item	Count	Percent
Q3: Grade Improvement		
A	20	17.5
N	42	36.8
D	52	45.6
Q4: Structure of Making Middle Grades Work		
A	20	17.5
N	36	31.6
D	58	50.9

Table 6 (continued).

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Q5: Recommend the use of Making Middle Grades Work		
A	56	49.1
N	54	47.4
D	3	2.6
SD	1	.9
Q6: High fidelity of implementation of Making Middle Grades Work		
A	58	50.9
N	37	32.5
D	19	16.7
Q7: School system needs more programs		
A	49	43.0
N	19	16.7
D	46	40.4
Q8: Making Middle Grades Work has improved the students Alabama Reading and Math test scores		
A	19	16.7
N	49	43.0
D	20	17.5
SD	26	22.8

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Table 6 (continued).

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Q9: Students have improved their abilities while involved with Making Middle Grades

Work

A	19	16.7
N	30	26.3
D	45	39.5
SD	20	17.5

Q10: Students have improved their Alabama Reading and Math Test testing skills

A	19	16.7
N	30	26.3
D	45	39.5
SD	20	17.5

Note: Note: SA=*Strongly Agree* (5) A=*Agree* (4) N=*Neutral* (3) D=*Disagree* (2)

SD=*Strongly Disagree* (1)

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Q3: More than 45% or 52, of the teachers selected disagree with the survey item of the majority of my students have improved their grade while involved with Making Middle Grades Work. Forty-two teachers or, 36.8%, chose neutral. Only 20, or 17.5%, of the teachers agreed with this survey item.

Q4: More than 50%, or 58 teachers, disagreed with the question that the structure and environment of Making Middle Grades Work is helpful for struggling students. Thirty-six teachers or, 31.6%, selected *neutral*. Only 20 or 17.5%, of the teachers selected *agree*.

Q5: More than 49%, or 56 teachers, agreed with I would recommend the use of the Making Middle Grades Work initiative. Fifty-four teachers, or 47.4%, were neutral and only four teachers disagreed or strongly disagreed with this survey item. These finding support the 11 components associated with comprehensive school reform (U.S. Department of Education, 1998).

Q6: A majority of the teachers agreed 50.9% with item 6. More than, 32.5% selected neutral on high fidelity of implementation of Making Middle Grades Work. Only 19, or 16.7% of the teachers, disagreed with high fidelity of implementation of Making Middle Grades Work on the perception survey.

Q7: The teachers gave mixed responses about whether the school system needs more programs. Forty-nine teachers, or 43%, agreed that more programs are needed in the school system. Nineteen teachers were neutral, or 16.7%, and 46, or 40.4%, disagreed with this survey item. Research by Slavin (1989) noted that education reform swings from one education fad to another. This may explain teachers' mixed responses on the perception survey for this item.

Q8: When the teachers answered if Making Middle Grades Work has improved the students' ARMT test scores only 19, or 16.7%, agreed with the survey item. The majority of the teachers were neutral on this survey item, (49) or 43.0%. Twenty teachers, or 17.5%, disagreed with the question that Making Middle Grades Work has improved the students' ARMT test scores.

Q9: More than 39%, or 45 teachers, disagreed with the majority of my students have improved their abilities while involved with Making Middle Grades Work. Twenty teachers or 17.5% strongly disagreed with this survey item. Only, 19 or 16.7% of the teachers agreed with the item.

Q10: Majorities of the teachers (57%), or 65, selected either *disagree* or *strongly disagree*. Thirty teachers, or 26.3%, were neutral. Nineteen teachers, or 16.7% agreed with the survey item.

Table 7 reflects administrators' perceptions of effectiveness of Making Middle Grades Work. Of the 50 administrators surveys sent out, 18 or 36% were completed. Fifty percent of the administrators selected 15-20 years of experience.

Table 7

*Administrators' Years of Teaching Experience* (n = 18)

Survey Item Years	Count	Percent
0-10	2	11.1
10-15	2	11.1
15-20	9	50.0
20-25	5	27.8
25 or more	0	0

Table 8 reflects the grade level of prior teaching experience of teachers surveyed. Two administrators, or 1.1%, selected elementary as their prior teaching experience. Ten administrators, or 55.6%, selected middle school as their prior teaching experience on the survey. Six, or 3.3%, of the administrators selected high school as their prior teaching experience on the survey.

Table 8

*Administrators' Grade Level of Prior Teaching Experience (n = 18)*

Survey Item Grade Level	Count	Percent
Elementary	2	1.1
Middle	10	55.6
High	6	3.3

Table 9

*Administrators' Perceptions of Effectiveness (n = 18)*

Survey Item	Count	Percent
Q3: Grade Improvement		
A	10	55.6
N	2	11.1
D	6	33.3
Q4: Structure of Making Middle Grades Work		
A	11	61.1
N	4	22.2
D	2	11.1
SD	1	5.6
Q5: Recommend the use of Making Middle Grades Work		
A	8	44.4
N	7	38.9
D	2	11.1
SD	1	5.6

Table 9 (continued).

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Q6: High fidelity of implementation of Making Middle Grades Work.

A	9	50.0
N	6	33.3
D	1	5.6
SD	2	11.1

Q7: More programs in the school system

A	12	66.7
N	2	11.1
D	4	22.2

Q8: Making Middle Grades has improved the students ARMT test scores

SA	1	5.6
A	9	50.0
N	5	27.8
SD	3	16.7

Q9: Students have improved their abilities while involved with MMGW

A	10	55.6
N	4	22.2
D	3	16.7
SD	1	5.6

Q10: Students have improved their ARMT testing skills

A	10	55.6
N	2	11.1
D	4	22.2

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Table 9 (continued).

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SD	2	11.1
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Note: SA=*Strongly Agree* (5) A=*Agree* (4) N=*Neutral* (3) D=*Disagree* (2)

SD=*Strongly Disagree* (1)

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Q3: More than 55%, or 10 administrators, selected agree with the survey item of the majority of their students have improved their grade while involved with Making Middle Grades Work. Two administrators, or 11.1%, chose neutral and 6, or 33.3%, disagreed with this survey item. This result shows that administrators perceived that their students' grades were improved while involved with Making Middle Grades Work.

Q4: More than 61%, or 11 administrators, agreed with the question do the structure and environment of Making Middle Grades Work is helpful for struggling students. Four administrators, or 22.2%, selected *neutral*. Only three administrators selected *disagree* or *strongly disagree*.

Q5: More than 44%, or 8 administrators, agreed with I would recommend the use of Making Middle Grades Work initiative. Seven administrators, or 38.9%, were neutral. Only three administrators disagreed or strongly disagreed with this survey item.

Q6: A majority of the administrators agreed (50.0%) with item 6. Administrators chose neutral (33.3%) on whether there was high fidelity of implementation of Making Middle Grades Work. Only 3, or 11.1%, disagreed on the implementation of Making Middle Grades Work.

Q7: The administrators overwhelmingly agreed with whether more programs were needed in the school system. Twelve administrators, or 66.7% agreed that more programs are needed in the school system. Only two administrators were neutral, or

11.1%, and 4, or 22.2% disagreed with this survey item. Administrators may feel political pressures to perform and to improve the profession of teaching and learning in terms of student achievement as noted by Fullan, (1995).

Q8: If Making Middle Grades Work has improved the students' ARMT test scores, only 10, or 55.6%, of the administrators agreed with the survey item. Five administrators were neutral on this survey item (27.8%). Three administrators, or 16.7%, strongly disagreed with the question that Making Middle Grades has improved the students' ARMT test scores.

Q9: More than 55%, or 10 administrators, agreed with the majority of my students have improved their abilities while involved with Making Middle Grades Work. Four administrators or 22.2%, were neutral with this survey item. Only 4 administrators, or 22.3%, disagreed or strongly disagreed with the item.

Q10: Finally, a majority of the administrators (55.6%) or 10 selected agree. Two administrator, or 11.1%, were neutral. Six administrators, or 33.3% either disagree or strongly disagree with the survey item.

Table 10 contains the means and standard deviations for the two groups. The perceptions of effectiveness surveys used a five-response Likert scale. The researcher assigned the number five to *strongly agree*, the number four to *agree*, the number three to *neutral*, the number two to *disagree*, and the number one to *strongly disagree*.

## Statistical Results

Table 10

### *Perceptions of the Effectiveness of the Making Middle Grades Work initiative*

	n	Mean	Standard Deviation
Teachers	114	2.94	.50
Administrators	18	3.22	.78

Note: SA=*Strongly Agree* (5) A=*Agree* (4) N=*Neutral* (3) D=*Disagree* (2)  
SD=*Strongly Disagree* (1)

### Research Questions

The researcher answered the following research questions during this study:

1. Is the Making Middle Grades Work initiative effective in increasing student achievement based on teachers and administrators perceptions?

Teachers' and administrators' perceptions were evident in their responses to the 10- item research survey. The researcher analyzed the data using SPSS 20.0 to determine frequency and percentage for each item. Table 6 gives the teachers' results in frequency and percentage. Table 9 records a similar analysis of the administrators' responses. The items on both surveys addressed the main components of MMGW: (a) grade improvement – item 3, (b) structure and environment – item 4, (c) recommendation of MMGW – item 5, (d) implementation of MMGW done to high fidelity – item 6, (e) more programs needed in the school system – item 7, (f) MMGW has improved ARMT scores – item 8, (g) MMGW has improved students' academic abilities – item 9, (h) MMGW has improved ARMT testing skills – item 10. Both administrators' and teachers'

responses to the surveys indicated a generally positive attitude toward the implementation of MMGW.

Even though the overall responses presented a positive view of MMGW implementation, some areas were not as encouraging. Of the 114 teachers who answered Item 8 concerning MMGW has improved ARMT scores, only 16.7% ( $n = 19$ ) marked *agree*. Conversely, 63.2% ( $n = 46$ ) checked *disagree* or *strongly disagree*. Teachers also had a negative perception when answering Item 10 concerning MMGW improving testing skills. Of the 114 teachers who responded to Item 10, 57% ( $n = 65$ ) marked *strongly disagree* or *disagree*.

2. Is Making Middle Grades Work initiative effective in increasing student achievement based on student test scores on the Alabama Reading and Math Test (ARMT)?

The researcher conducted a paired-samples  $t$  test to compare 2010-2011 reading scores to 2011-2012 reading scores and to compare 2010-2011 math scores to 2011-2012 math scores. There was a significant difference in the scores for 2010-2011 reading ( $M = 79.75$ ,  $SD = 10.1$ ) and 2011-2012 reading ( $M = 83.27$ ,  $SD = 9.1$ ) conditions;  $t(131) = -6.22$ ,  $p < .001$ . There was a significant difference in the scores for 2010-2011 math ( $M = 63.33$ ,  $SD = 19.3$ ) and 2011-2012 math ( $M = 72.9$ ,  $SD = 14.1$ ) conditions;  $t(131) = -10.18$ ,  $p < .001$ . These results suggest that reading and math scores improved significantly from 2011 to 2012 on the Alabama Reading and Math Test.

3. What are teachers' and administrators' perceptions regarding the implementation of Making Middle Grades Work initiative?

Of the 18 administrators who responded to Item 6, implementation of Making

Middle Grades Work was done to a high fidelity, 38.9% ( $n = 7$ ) replied *agree* or *strongly agree*. Of the 114 teachers who responded to Item 6, the high fidelity of implementation of Making Middle Grades Work, 50.9% ( $f = 58$ ) replied *agree*. Teachers and administrators agreed on the positive nature of high fidelity of implementation of Making Middle Grades Work.

The researcher conducted an independent-samples  $t$  test to determine if there was a significant difference between teachers' and administrators' perceptions of effectiveness of the Making Middle Grades Works initiative. The analysis revealed that there was a significant difference between teachers' and administrator's perceptions of effectiveness of the Making Middle Grades Work. The analysis revealed that there is a significant difference between teachers' ( $M = 2.42$ ,  $SD = .96$ ) and administrators ( $M = 3.5$ ,  $SD = .85$ ) conditions;  $t(130) = 4.46$ ,  $p = .006$ . Administrators' ( $M = 3.22$ ,  $SD = .78$ ) perceptions of the effectiveness of Making Middle Grades Work were higher than the perceptions of the teachers. Teachers' ( $M = 2.94$ ,  $SD = .50$ ) perceptions of the effectiveness of Making Middle Grades Work were lower than the perceptions of the administrators.

#### 4. What do teachers and administrators perceive to be positive aspects of Making Middle Grades Work?

The researcher used a thematic approach to analyze the data generated by the open-ended question. From this thematic approach, administrators and teachers perceive several positive aspects of MMGW. Some aspects that both administrators and teachers perceive to be positive were (a) the structure of MMGW; (b) the recommendation of MMGW; (c) high fidelity of implementation of MMGW; and (d) more programs needed in school system. These aspects correlate with the research of SREB.

5. What improvements did teachers and administrators recommend for Making Middle Grades Work?

Teachers thought that Making Middle Grades Work could be improved in the areas of (a) increased ARMT test scores; (b) improved academic abilities; and (c) improved testing skills since their involvement in Making Middle Grades Work.

Administrators thought that student grades needed improvement while involved with Making Middle Grades Work. Indeed, a comment by one of the participants illustrates some of the complex issues:

“I am not a huge fan of Making Middle Grades Work. I feel that highly structured programs like this stifle a teacher’s ability to teach effectively at times, also many of the strategies do not hold students accountable and reinforce irresponsible academic practices.”

Another comment by one of the participants states:

“Making Middle Grades Work will work in small classes; special education students must be pulled, most cannot do grade level work and become disruptive. In an 8<sup>th</sup> grade social studies class with 57 students, it was extremely hard to keep order, let alone teach. The Making Middle Grades Work strategies work well in classes of 20 or less and they still work in a class of 30 if all students want to learn—I have asked how to motivate the child who does not want to learn at all of the workshops—reply—Oh, that’s the million dollar question. We don’t have the answer for you. Small class is a must.”

Another comment by one of the participants states:

“Once a program starts give it time to work by building on the program, not changing the program altogether.” As noted by Slavin (1989), educational reform swings from one fad to another like a pendulum.

Another participant commented that:

“The program works only if it is used on a consistent basis.”

Conversely, another participant commented that:

“The Making Middle Grades Work initiative is a very good concept but there is not enough consistent on-site support and monitoring of the implementation of the initiative. There is also not enough accountability in determining whether the initiative works. Making Middle Grades Work concept has been in existence for many years and the effective implementation of the program is very weak.”

Another participant on the survey expressed:

“The Making Middle Grades Work program sets the students up for failure. The idea of constantly giving students chance after chance will give them a false sense of reality.”

A teacher commented:

“The Middle Grades Work program made the teacher develop team units to deal with student achievement. Also, the group identified problem areas that needed corrections and the team effort helped to solve the problem issue.”

Finally, a participant stated:

“Making Middle Grades Work assists in preparing students for rigorous high school studies. This works because it assists in managing the classes while doing classroom assignments: example, when the teacher is consistent; this helps the student to remain on task. The teacher inspects

what she expects of her students. It activates higher level thinking skills.

It is a modification of the curriculum. It allows for preassessment as well as ongoing assessments. It's our role as classroom teachers to prepare the content, introduce it to the students, and encourage them to engage in the learning process and assess student learning."

The last participant's comment reflects the primary mission of Making Middle Grades Work, which is to create a culture of high expectations and continuous improvement that prepares middle grades students for challenging high school studies. Words such as caring, sharing, trusting, and cooperating describe a school's climate or culture (Sashkin & Walberg, 1993). School climate and culture is a factor that effects student achievement (Marzano, 2003).

6. Are there statistically significant relationships between teachers' and administrators' perceptions of Making Middle Grades Work and the achievement levels of their students?

The researcher conducted a Pearsons  $r$  to assess the relationship between the perception of the teachers and administrators and their schools' score on the Alabama Reading and Math Test. There was no correlation between the variables of perception of the teachers and administrators and their schools' score on the Alabama Reading and Math Test. There was no correlation between perceptions of Making Middle Grades work and the 2010-2011 math score,  $r = .028$ ,  $n = 132$ ,  $p = .749$ . There was no correlation between perceptions of Making Middle Grades work and the 2011-2012 math score  $r = .029$ ,  $n = 132$ ,  $p = .738$ . There was no correlation between perceptions of Making Middle Grades work and the 2010-2011 reading score  $r = .080$ ,  $n = 132$ ,  $p =$



.364. Also, there was no correlation between perceptions of Making Middle Grades work and the 2011-2012 math score  $r = .069$ ,  $n = 132$ ,  $p = .434$ .

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Introduction

The purpose of this study was to assess the effectiveness of the Making Middle Grades Work initiative. This study analyzed the performance of the Making Middle Grades Work initiative using a survey of teachers and administrators to determine if there was a significant difference among teachers and administrators of the effectiveness of Making Middle Grades Work. The study sought to determine the effect of Making Middle Grades Work on achievement in all subject matter, especially math and science. Making Middle Grades Work incorporates several components such as hands-on, project-based activities. According to Degenhart et al. (2005), students develop improved higher-order thinking skills and increased positive attitudes toward subject matter when mathematics instruction, as well as science instruction, follows a more hands-on, inquiry-based approach. Chapter V summarizes the study, presents a summary of results and conclusions, makes recommendations for future research, practice, and policy, and presents implications.

#### Summary of Results

After receiving the Institutional Review Board approval to conduct study, the researcher distributed perceptions of effectiveness surveys to teachers and administrators. The researcher received 114 teacher and 18 administrator surveys. Data were gathered and analyzed on students' Alabama Reading and Math Test (ARMT) scores. The researcher used quantitative surveys to determine the participants' perceptions of the Making Middle Grades Work initiative. The researcher also used archival test data to determine if there has been any change in student achievement over the 2010-2011 and

2011-2012 school years during the implementation of Making Middle Grades Work initiative. The researcher analyzed data from the Alabama Reading and Math test using a paired samples  $t$  test to determine whether students performed better after implementation of Making Middle Grades Work.

An independent-samples  $t$  test showed a significant difference between administrators' and teachers' perceptions. The administrators had the most positive perceptions of the effectiveness of the Making Middle Grades Work initiative. The administrators felt that the Making Middle Grades Work initiative has been successful in improving students' grades. However, conducting Pearson  $r$  found no correlation between the perception of the teachers and administrators and their schools' score on the Alabama Reading and Math Test. In the world of high stakes testing, Making Middle Grades Work has shown value with improving the Alabama Reading and Math Test scores in Mobile County middle schools.

The results of this study indicated that Making Middle Grades Work initiative has achieved success with students in their schools. Statistical data showed that the overall performance of students improved from the 2010-2011 to 2011-2012 school year. In addition, administrators gave a more positive score on the surveys for the Making Middle Grades Work initiative than did the teachers. Some of the reasons for the success of the initiative are professional development of teachers and administrators, enhanced teaching strategies, and a focus on teaching math and science. These reasons for success are similar to the eight indicators provided by Jones et al. (1994)

## Implications

### *Student Achievement*

The researcher conducted a paired-samples  $t$  test to compare 2010-2011 reading scores to 2011-2012 reading scores and to compare 2010-2011 math scores to 2011-2012 math scores. The data in Table 1 were computed giving the results of the paired-samples  $t$  test showing that there was a significant difference between the 2010-2011 reading scores to 2011-2012 reading scores and 2010-2011 math scores to 2011-2012 math scores. The statistical data focused on the performance of students in their individual school on the Alabama Reading and Math Test (ARMT) before and after implementation of the Making Middle Works initiative. Student performance on the Alabama Reading and Math Test was very good and showed significant progress with student achievement. This correlates with Newell (2003) idea that developing new programs and motivating students to learn are the keys to improvement of achievement and success in the classroom.

### *Administrators' Perceptions of Effectiveness*

A majority of the administrators felt that the implementation of Making Middle Grades Work had brought positive change to their schools. Most of the administrators considered improvements in test scores and instruction as the most apparent changes because of the Making Middle Grades Work initiative. In addition, a majority of the administrators agreed with high fidelity implementation of Making Middle Grades Work. The administrators' opinions may have been higher than the teachers' opinions because teachers are working more closely with the initiative. In other words, the teachers are in the trenches with the students and may perceive the initiative a little differently from the

administrators. While the administrators are primarily observing and evaluating the teacher, the teacher is actually applying the strategies in the classroom.

On the perceptions of effectiveness survey, a majority of the administrators agreed that the structure of Making Middle Grades Work was beneficial. This supports the important characteristic of structure with Making Middle Grades Work (SREB, 2010). On the perception of effectiveness survey, a majority of the administrators agreed that their students' grades improved while in the Making Middle Grades Work initiative. The paired sample  $t$  test completed on the data supports this perception.

Just like the administrators, many of the teachers agreed with the implementation of Making Middle Grades Work. Just like the administrators, many of the teachers agreed with the implementation of Making Middle Grades Work. Teachers also agreed with recommending the use of the Making Middle Grades Work to others. Teachers commented about the use of project-based learning with the Making Middle Grades Work initiative for math and science classes. Project-based learning incorporates inductive teaching methods such as inquiry-based learning (Prince & Felder, 2007). The students' projects fit their own personal interest, abilities, and learning styles and are completely learner-centered (Harris & Katz, 2001).

The majority of the teachers were neutral on the question of improved Alabama Reading and Math Test scores of their students, although the paired sample  $t$  test supports the improved test scores on the Alabama Reading and Math Test. The majority of the teachers disagreed with their students' testing skills having improved. There again teachers may not be able to see the gains in their students because of working very closely with them.

## Conclusions

The results of this study revealed that there is a significant difference between the teachers' and administrators' perceptions of effectiveness of the Making Middle Grades Work initiative in Mobile County. This indicated that the administrators had a stronger opinion about the effectiveness of the Making Middle Grades Work initiative than the teachers did. The administrators had the highest mean of the two groups. The mean of the administrators was over three, which indicated that most of the administrators had a positive perception of the Making Middle Grades Work initiative.

The majority of teachers and administrators in the Making Middle Grades Work schools believe that Making Middle Grades Work implementation has benefited their schools. In addition, another conclusion based on results from the survey is related to students having improved their Alabama Reading and Test skills. The majority of the teachers did not perceive that the Making Middle Grades Work initiative had improved their students' testing skills. However, on the Alabama Reading and Math Test the students performed significantly higher than the previous year. The results of this study revealed that there was no significant correlation found between the variables of perception of the teachers and administrators and their schools' score on the Alabama Reading and Math Test.

Teachers with middle grade certification engage more frequently in "best practices," which affect achievement (Mertens, Flowers, & Mulhall, 2002). However, as shown in Table 5, the majority of the teachers in this study indicated on the survey that they have high school experience. Hiring more teachers if available specifically for middle schools would increase teachers' use of *best practices* in the classroom. As is known, teachers are a very important factor in the learning process. According to Jones et

al. (1994), teacher roles for engaged learning are important. The teacher is most effective as the facilitator rather than just the primary instructor.

#### Limitations

The setting is both strength and a weakness. On one hand, the research took place in a natural setting. On the other hand, overall ecological consistency was a problem. Multiple confounding variables including human development issues and environmental influences within the schools can affect internal validity. These included personnel turnover, student mobility, and student population changes. Concurrent programs and practices not specific to the Making Middle Grades Work initiative may have influenced outcomes.

The next limitation dealt with the distribution of the surveys. The Institutional Review Board approval took longer than expected. Instead of the teachers and administrators completing the surveys well before the end of the school year, it had to be done near the end. This became a limitation because teachers and administrators were busy with preparations for closing school and may have not had time to complete the survey. Completion of the perception surveys earlier in the year may have yielded a higher amount of perception surveys being completed and returned.

#### Recommendations for Practice

For Making Middle Grades Work to be successful, it is imperative that the initiative has a smooth implementation. Making Middle Grades Work addresses a teacher's instructional strategies that accelerate student achievement. According to Marzano (2003), a teacher's instructional strategies have tremendous impact on the academic success of a student. However, none of these strategies will be effective if teachers and administrators fail to put into practice the recommended strategies.

One means of ensuring compliance may be to increase the involvement by the Making Middle Grades Work specialist in each school. This recommendation will involve a greater number of specialists in the schools to provide more on-site support for classroom teachers. Teachers, new to the initiative or those struggling to implement Making Middle Grades Work, will have assistance needed to improve instruction.

Another recommendation for practice is the development of a program to increase the effectiveness of administrators as instructional leaders. A few teachers' responses to the survey commented on administrators' effectiveness as instructional leaders. According to Cooney (2006), school leadership focuses on supporting what and how teachers teach by providing common planning time and the Making Middle Grades Work key practices. It may be important for Making Middle Grades Work to designate a specialist to provide on-site support for administrators to help them follow through with their tasks of participating in the initiative. In order to improve the administrators' effectiveness as instructional leaders, the Making Middle Grades Work initiative should hire more specialists to visit the schools more often.

#### Recommendations for Policy

Survey responses from this study suggested that most participants felt positive about the Making Middle Grades Work program. Perception surveys indicated that the majority of teachers and administrators would recommend the Making Middle Grades Work initiative. The Making Middle Grades Work initiative seemed to have a somewhat more positive perception from the administrators than from the teachers. The Making Middle Grades Work initiative utilizes research-based strategies such as high expectations and extra time and helps use of data, hands-on activities, and use of



technology. As a result, students who have attended the program have improved their Alabama Reading and Math Test scores.

A few of the administrators' survey comments expressed the need for expanding the Making Middle Grades Work initiative. The number of Making Middle Grades Work specialists who visit the school to help with classroom strategies of teachers should be increased. Increasing the Making Middle Grades Work specialists in the school may allow better implementation, more intervention of teachers with strategies, and increased student achievement.

#### Recommendations for Future Research

Researchers need to do more research on the effectiveness of Making Middle Grades Work. In addition, researchers need to study efficient methods of implementation and the process that leads to success. Most research to date has been nonexperimental. Based on the results of this study, there are three recommendations for future research. The first recommendation is to replicate this study with a larger population of schools. Making Middle Grades Work is currently implemented in more than 350 middle grade sites in 19 states. These schools, representing all geographic locales, rural to urban settings, small to large student enrollment, and wider ranges of socioeconomic levels, will provide a more representative group from which to assess Making Middle Grades Work's impact on student achievement.

Another recommendation for future research would be to conduct a long-term study to determine: (a) if these students continue to perform academically and graduate from high school; (b) if these students were more ready for high school; and (c) if these students continue on to college and university for future study. The final recommendation for determining the effectiveness of the Making Middle Grades Work

initiative is to conduct an in-depth study of the administrators' role in ensuring the Making Middle Grades Work's effectiveness. Especially needed are longitudinal studies to determine effectiveness of Making Middle Grades Work. Ultimately, when students are engaged in well-planned lessons that use research-based strategies, improved performance begets higher achievement levels in all children.

## APPENDIX A

## SURVEY INSTRUMENT

**Making Middle Grades Work Administrator Survey**

**Please check all boxes that are appropriate to you.**

1. How many years of teaching experience do you have?  
           0-10        10-15        15-20        20-25        25 or more
2. What grade level was your prior teaching experience?  
           Elementary        Middle        High        None        Other \_\_\_\_\_
3. The majority of my students have improved their grade while involved with Making Middle Grades Work.  
           Strongly Agree    Agree    Neutral    Disagree    Strongly Disagree
4. The structure and environment of the Making Middle Grades Work is helpful for struggling students.  
           Strongly Agree    Agree    Neutral    Disagree    Strongly Disagree
5. I recommend the use of the Making Middle Grades Work initiative.  
           Strongly Agree    Agree    Neutral    Disagree    Strongly Disagree
6. The implementation of Making Middle Grades Work was done to a high fidelity.  
           Strongly Agree    Agree    Neutral    Disagree    Strongly Disagree
7. More programs such as Making Middle Grades Work are needed in the school system.  
           Strongly Agree    Agree    Neutral    Disagree    Strongly Disagree
8. Making Middle Grades Work has improved the students' Alabama Reading and Math test scores.  
           Strongly Agree    Agree    Neutral    Disagree    Strongly Disagree
9. The majority of my students have improved their abilities while involved with the Making Middle Grades Work initiative.  
           Strongly Agree    Agree    Neutral    Disagree    Strongly Disagree
10. The majority of my students have improved their ARMT testing skills since their involvement with Making Middle Grades Work.  
           Strongly Agree    Agree    Neutral    Disagree    Strongly Disagree

**Please provide any additional comments about the Making Middle Grades Work initiative or achievement programs that may help with this study.**

## APPENDIX B

## SURVEY INSTRUMENT

**Making Middle Grades Work Teacher Survey**

**Please check all boxes that are appropriate to you.**

1. How many year of teaching experience do you have?  
           0-10        10-15        15-20        20-25        25 or more
2. What grade level was your prior teaching experience?  
           Elementary        Middle        High        None        Other \_\_\_\_\_
3. The majority of my students have improved their grade while involved with Making Middle Grades Work.  
           Strongly Agree    Agree    Neutral    Disagree    Strongly Disagree
4. The structure and environment of the Making Middle Grades Work is helpful for struggling students.  
           Strongly Agree    Agree    Neutral    Disagree    Strongly Disagree
5. I recommend the use of the Making Middle Grades Work initiative.  
           Strongly Agree    Agree    Neutral    Disagree    Strongly Disagree
6. The implementation of Making Middle Grades Work was done to a high fidelity.  
           Strongly Agree    Agree    Neutral    Disagree    Strongly Disagree
7. More programs such as Making Middle Grades Work are needed in the school system.  
           Strongly Agree    Agree    Neutral    Disagree    Strongly Disagree
8. Making Middle Grades Work has improved the students' Alabama Reading and Math test scores.  
           Strongly Agree    Agree    Neutral    Disagree    Strongly Disagree
9. The majority of my students have improved their abilities while involved with the Making Middle Grades Work initiative.  
           Strongly Agree    Agree    Neutral    Disagree    Strongly Disagree
10. The majority of my students have improved their ARMT testing skills since their involvement with Making Middle Grades Work.  
           Strongly Agree    Agree    Neutral    Disagree    Strongly Disagree

**Please provide any additional comments about the Making Middle Grades Work initiative or achievement programs that may help with this study.**

## APPENDIX C

### PERMISSION FORM FROM IRB



THE UNIVERSITY OF  
SOUTHERN MISSISSIPPI

#### INSTITUTIONAL REVIEW BOARD

118 College Drive #5147 | Hattiesburg, MS 39406-0001  
Phone: 601.266.6820 | Fax: 601.266.4377 | [www.usm.edu/irb](http://www.usm.edu/irb)

### NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.  
Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: **13042903**

PROJECT TITLE: **The Perceptions of the Effectiveness  
of Making Middle Grades Work**

PROJECT TYPE: **Dissertation**

RESEARCHER(S): **Darryl Porter**

COLLEGE/DIVISION: **College of Education & Psychology**

DEPARTMENT: **Educational Leadership**

FUNDING AGENCY/SPONSOR: **N/A**

IRB COMMITTEE ACTION: **Expedited Review Approval**

PERIOD OF APPROVAL: **05/15/2013 to 05/14/2014**

**Lawrence A. Hosman,  
Ph.D.  
Institutional Review  
Board**

## APPENDIX D

## COVER LETTER TO PARTICIPANTS

To Whom it May Concern,

My name is Darryl Porter, and I am currently pursuing a doctoral degree in educational leadership at The University of Southern Mississippi. The research is being conducted under the supervision of Dr. David Lee for research related to my dissertation. I am also a middle school assistant principal in Mobile, Alabama. I am conducting research on the perceptions of teachers and administrators of the effectiveness of the Making Middle Grades Work initiative. Information gathered from this study may show benefits and possible improvement for Making Middle Grades Work. The results of this study will be included in my dissertation, and one completed copy of my study will be submitted to the Mobile County Public School System Division of Research, Assessment, Grants, and Accountability.

Your participation in this research study is needed, but strictly voluntary and anonymous. If you would not like to participate in this study, there is no obligation. If you choose to participate in this study, you may withdraw at any time without penalty. All survey responses will be kept, confidential and participants will not be identified. Any information inadvertently obtained during the course of this study will remain completely confidential. After completing the survey, please place in the box. It will take about 5-10 minutes to complete the survey. The key issues of potential risk in my study will be confidentiality and participant anxiety. Specific measures will be taken to ensure confidentiality, voluntary participation, and the right to withdraw from the study at any time. The data from submitted survey will be combined for analysis. Surveys will be destroyed after analysis of data. By completing and returning the attached survey, the respondent gives permission for this anonymous and confidential data to be used for the purposed described above. If you have any questions or concerns, please contact me at the telephone numbers listed below.

This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the Institutional Review Board Office, Box 5148, Hattiesburg, MS 39406, and (601) 266-6820.

Sincerely,

Darryl Porter

Home (251) 607-0031

Work (251) 221-2021

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